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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,740	07/03/2001	Antonella Porta	CM2393	2412

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EXAMINER

DOUYON, LORNA M

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/898,740

Applicant(s)

PORTA ET AL.

Examiner

Lorna M. Douyon

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 16, 2003 has been entered.

1. Claims 1-3, 6-17 are pending.

Claim Objections

2. Claim 1 is objected to because of the following informalities: "polyethylene terephthalate" in line 3 is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 1751

4. Claims 1-3, 6, 8-9, 13-15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Dickenson et al. (US Patent No. 4,876,023), hereinafter "Dickenson".

Dickenson teaches a laundry product comprising a particulate laundry composition releasably contained within a closed, single- or multi-compartment sachet which is formed of water-insoluble, non-woven bonded substrate material (see abstract). In Example 1, Dickenson teaches a twin-compartment sachet made from a non-woven, air-laid, thermally-bonded substrate material which was formed of crimped polyester/polyethylene bicomponent fibers and the two compartments are filled with 120 cc each of a detergent composition comprising 2 wt% C₁₂TMAB (C₁₂ alkyl trimethyl ammonium bromide), 12 wt% zeolite, 4 wt% MA/AA (maleic acid/acrylic acid copolymer m. wt. 70,000), surfactants, enzymes and brighteners (see col. 9, line 10 to col. 10, line 10) (the C₁₂TMAB and MA/AA corresponding to the dye absorbing agent and/or dirt binding agent). Dickenson teaches the limitations of the instant claims. Hence, Dickenson anticipates the claims.

5. Claims 1-3, 6-10, 14, 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Masschelein et al. (US Patent No. 6,410,496), hereinafter "Masschelein '496".

Masschelein '496 teaches a laundry device for use with a washing machine which includes a bag storing a water insoluble dye transfer inhibiting (DTI) compound and a container having a compartment for receiving and dispensing a dosed amount of detergent during use (see abstract). While the laundry devices are described as comprising a bag in combination with a container which can also dose a laundry detergent to the wash water during use, the bags can also be used individually by merely placing the bag directly in the wash water of the washing

Art Unit: 1751

machine, or by attaching it to the drum or the agitator of the washing machine through mechanical or other means (see col. 6, lines 36-44; Figure 10). The water insoluble DTI compound may comprise a water-soluble dye transfer inhibiting agent which is bound to a water insoluble carrier such as zeolites (see col. 7, lines 1-6). In Example 1, Masschelein '496 teaches a water-insoluble DTI compound comprising cross-linked polyvinylpyridine N-oxide (0.5% divinylbenzene cross-linking degree) which is placed in a spunbonded polypropylene non-woven material, and after completing 15 cycles, the water-insoluble DTI compound and the non-woven material have a Dye Removal Efficiency of about 77% dye removal (see col. 12, line 63 to col. 13, line 7). Masschelein '496 teaches the limitations of the instant claims. Hence, Masschelein '496 anticipates the instant claims.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

6. Claims 1-3, 6-10, 14, 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Masschelein et al. (US Patent No. 6,521,582) hereinafter "Masschelein '582".

Masschelein '582 teaches a laundry device for use with a washing machine which includes a bag storing a water insoluble dye transfer inhibiting (DTI) compound and a container having a compartment for receiving and dispensing a dosed amount of detergent during use (see

Art Unit: 1751

abstract). While the laundry devices are described as comprising a bag in combination with a container which can also dose a laundry detergent to the wash water during use, the bags can also be used individually by merely placing the bag directly in the wash water of the washing machine, or by attaching it to the drum or the agitator of the washing machine through mechanical or other means (see col. 6, lines 41-58; Figure 10). The water insoluble DTI compound may comprise a water-soluble dye transfer inhibiting agent which is bound to a water insoluble carrier such as zeolites (see col. 7, lines 4-10). In Example 1, Masschelein '582 teaches a water-insoluble DTI compound comprising cross-linked polyvinylpyridine N-oxide (0.5% divinylbenzene cross-linking degree) which is placed in a spunbonded polypropylene non-woven material, and after completing 15 cycles, the water-insoluble DTI compound and the non-woven material have a Dye Removal Efficiency of about 77% dye removal (see col. 12, line 62 to col. 13, line 6). Masschelein '582 teaches the limitations of the instant claims. Hence, Masschelein '582 anticipates the instant claims.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-3, 6, 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US Patent No. 5,698,476), hereinafter "Johnson".

Johnson teaches a laundry article which comprises a dye absorber and a dye transfer inhibitor which are introduced into a wash liquor via a support matrix and which provides a method for preventing the redeposition of extraneous dyes onto other wash items, while simultaneously providing an indicator system for the manifestation of such scavenging process (see abstract). Materials which are suitable as dye absorbers for the laundry article include (quaternary N-substituted ammonium)-hydroxy-haloalkyl compounds; salts of epoxyalkyl ammonium compounds such as glycidylmethylammonium chloride; polyquaternium ammonium

Art Unit: 1751

compounds; polyamphoterics; quaternized starches; proteins; chitin; chitosan; choline chloride; polyvinyl amine; polyethylene imine and combinations thereof (see col. 4, line 60 to col. 3, line 3). Besides scavenging or absorbing extraneous dyes from the wash solution, an additional function of the dye absorber is to impart a color change to the support matrix with which it is associated (see col. 4, lines 46-59). Materials which may be acceptable as dye transfer inhibitors include polyvinyl pyrrolidone; polyvinyl alcohol; polyvinyl imidazole; polyamine-N-oxides such as magnesium aluminate; polyvinyl oxazolidone; cationic and amphoteric surfactants (see col. 7, lines 8-30). The support matrix can comprise any type of natural or synthetic material, for example, cotton, polyester, polyethylene or polypropylene (see col. 7, line 66 to col. 8, line 49). The form in which the support matrix may be found for purposes of the present invention is virtually limitless, for example, it may consist of a fiber, filament, sheet, fiber balls, or beads and clathrates or other forms of intercalation supports in addition to the more conventional sheet form (see col. 8, line 64 to col. 9, line 7). Ultimately, any item or object that can conveniently be retrieved from a wash load, either after washing or after drying would be appropriate (see col. 8, line 64 to col. 9, line 10). Johnson also teaches laundering dyed fabric with a laundry detergent and the laundry article (see col. 12, line 45 to col. 13, line 40). Johnson, however, fails to specifically disclose the support matrix in a sachet form.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare the support matrix in a sachet form because Johnson specifically desires any form of the support matrix, which includes a sachet, which can conveniently be retrieved from a wash load, either after washing or after drying.

Art Unit: 1751

10. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson as applied to the above claims, and further in view of Van Leeuwen et al. (US Patent No. 5,912,221), hereinafter "Van Leeuwen".

Johnson teaches the features as described above. Johnson, however, fails to disclose crosslinked polyvinyl pyridine-N-oxide.

Van Leeuwen teaches that a synergistic dye transfer inhibition action is obtainable if a water-insoluble polymeric dye transfer inhibition agent such as cross-linked polyvinyl pyridine-N-oxide is used in combination with the known water soluble dye transfer inhibition polymers such as polyvinyl pyrrolidone and polyamine-N-oxides (see col. 1, lines 34-37; col. 2, lines 8-56; col. 3, line 5+; Example 1 under col. 15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the crosslinked polyvinyl pyridine-N-oxide of Van Leeuwen with the water soluble dye transfer inhibition polymers such as polyvinyl pyrrolidone and polyamine-N-oxides of Johnson because this would provide a synergistic dye transfer inhibition action as taught by Van Leeuwen.

Response to Arguments

11. Applicants' arguments filed December 16, 2003 have been fully considered but they are not persuasive.

With respect to the rejection based upon Dickenson, Applicants argue that the limitation "... wherein said fibers are polypropylene, polyethylene, polyamide, polyethylene terephthalate or mixtures thereof ..." in relevant part of claim 1 would exclude the polyester of Dickenson.

Art Unit: 1751

The Examiner respectfully disagrees with the above argument because claim 1 requires " ...the sachet comprised of fibres which do not exhibit an affinity for fugitive dye or dirt, wherein said fibers are polypropylene, polyethylene, polyamide, polyethylene terephthalate or mixtures thereof . . ." which means that the sachet can comprise other fibres other than those recited. The "comprising" language leaves the claim open for the inclusion of unspecified ingredients even in major amounts, see *ex parte Davis et al.*, 80 USPQ 448 (PTO Bd. App. 1948). Also, the broad "comprising" and "containing" terminology do not exclude the presence of other ingredients in the composition, unlike the narrow "consisting of" language, see *Swain v. Crittendon*, 332 F 2d 820, 141 USPQ 811 (CCPA 1964). It is only the "fibres which exhibit an affinity for fugitive dye or dirt" which are limited to those recited.

With respect to the rejection based upon Johnson, Applicants argue that Johnson teaches utilizing a support matrix which can be in the form of fiber balls, beads, clathrates or sheets and Johnson does not teach or suggest Applicants' claimed invention which requires a sachet defining a cavity wherein the laundry additive is located in the cavity. Applicants also argue that in viewing the teachings of Johnson as a whole, i.e., the visual color change to the support matrix teaches away from the present invention.

The Examiner respectfully disagrees with the above argument because in col. 8, line 64 to col. 9, line 7, Johnson teaches that the form in which the support matrix may be found for purposes of the present invention is virtually limitless, and include such configurations as fiber balls or beads and clathrates or other forms of intercalation supports in addition to the more conventional sheet form. Hence, a sachet defining a cavity as required in the present claims would have been envisaged by a person of ordinary skill in the art as one form of support matrix

Art Unit: 1751

in Johnson. With respect to the support matrix of Johnson which fulfils the dual function of delivery system and visual aid, please note that Johnson teaches in Example II-8 a composite fabric of reactive and nonreactive fibers, such as rayon and polyester (or cotton and polyethylene), which was found to significantly color only the rayon; or another modification wherein specific regions of reacted and unreacted material is produced on a single substrate in order to generate regions of different functionality (see col. 16, lines 6-26). Hence, the unreacted region is equivalent to the "fibers which do not exhibit an affinity for fugitive dye or dirt" as required in claim 1 and the reacted region is equivalent to the carrier like cotton sheet as required in claims 11-12.

With respect to the rejection of claims 7-8 based upon Johnson in view of Van Leeuwen, Applicants argue that even if the two references were combined, they still would offer no motivation or suggestion to one of ordinary skill in the art to comprise a laundry additive sachet comprised of fibers which do not exhibit an affinity for fugitive dyes and dirt.

The response above applies here as well. Hence, the combination of Johnson with Van Leeuwen is proper and is maintained.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lorna M. Douyon
Primary Examiner
Art Unit 1751